Work Orde Wednesday, Sept				*106	3499*						Page 1
Item ID: Revision ID:	D3915-041			Accept	*N900	040	100	)* s	etup Stai	rt *N	S1*
Item Name:	Light Lid Ass	semby, Long Basket							Sto	<sup>p</sup> *N	S2*
Start Date:	9/4/2013	Start Qty: 1.00	*1*		Cust Item 1	ID:					
Required Date: Reference:	9/11/2013	Req'd Qty: 1.00	*1*		Customer:						
Approvals:	Process Pla	an:	Date: 13-69-4	Tooling:	D	ate:		R	tun Stai Sto	I <i>N</i>	R1*
	QC:		Date:	SPC (Y/N):	<b>D</b>	ate:			50	* *N	R2*
Sequence ID/ Work Center II	<b>D</b>	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Rev	vision Nbr					-				
D3915	E										
*100 *100* Large Fab Large Fab		Weld per dwg A/R Alu Large Fab  Memo 1- assemble	minum rod Batch: 	0.00	nen welding				M	13.09	. 06
		D4019-3, v	weld top and bottom then make remaining sides of D4019-3 I	e a small hole in the we	eld to let air out.						
	,		OT WELD THE (4) CORNED TO GET THE ACID AND **							•	
		2- weld hin	ge, label plate and Mounting	plates as per dwg D391	15						
*110 *110*		QC9- Inspect visual per	QSI004- Fusion Welds	0.00					lo.		DAS
*11 <b>0</b> *		Memo		0.00					13-0	213	8-89

Memo

Quality Control

							٠				DQA:	Dat	:e: _	<u> </u>
NCR: Ye	es / No					WORK ORDER NON-C	100	NFORM	MANCE / UP	DATE				
											QA Closed:	Dat	e:	
Work Orde	ŕ:					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS		
Part No	0					Rework Scrap Use-as-is Work Order Update		Thern	Skid-tube  Machining noforming Large Fab	Crosstube Small Fab Finishing Composite	-4	Water Jet d. Eng. Coor. re/Packaging Supplier		Engineering Quality Other
Root				Des	crip	tion of work order update		nitial	Act	tion	Sign &		Т	
Cause	Date	Step	Qty		o	r Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	1	QC Inspector
Ooc/Data Equip/Tooling Operator Material Setup Other Process Supplier Fraining Unapproved														
Jiiappioveu 1		<u>.                                    </u>	٠	<u>I</u>		F.	AUL	T CATE	GORY			l		
Landin	g Gear					General								
- - - -	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube					Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Misread			Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct issing Vrong		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other	
}	Ripples in	-				Drill Holes	Offset							
.	Torque W		xtrusio	n		Drawing		4	Calibration					
	Turning Sequence Finish Out of Sequence													

Outside Dimensions

Wave/Twist in Tube

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Work Orde Wednesday, Sept				*106	3499*						Page 2
Item ID: Revision ID: Item Name:	D3915-041	semby, Long Basket		Accept	*N900	ი4ი	100	)*	Setup Sta	14.7	-
Start Date: Required Date: Reference:	9/4/2013 9/11/2013	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:					
Approvals:	Process Pla	an:	Date:	Tooling:	D:	ate:	-	]	Run Sta	" *NR	1*
	QC:		Date:	SPC (Y/N):		ate:			Sto	*NR	2*
Sequence ID/ Work Center II	)	Operation Description		Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	~	nsp. tamp
120		QC5- Inspect part compl	eteness to step on W/O	0.00	•					6	DAS
*120* QC Quality Control		Memo		0.00					_13~	En .	09
Quarity Control									J	,	
130		Chemical Conversion Co	pat per QSI005 4.1	0.00				j	-p/s	£ 13-5	/2
*120* HandFinish		Memo		0.00					- 770	7 15 6	' OL

140

\*140\* Large Fab Large Fab

Hand Finishing

Weld per dwg A/R Aluminum rod Batch:\_\_\_\_\_

\*\*\*ENSURE TO RINSE CAREFULLY ACID AND ALODINE\*\*\*

B126430

0.00

0.00

1- weld (4) corners

Memo

1x St 13.09-12

												DQA:	L	rate:	
NCR: Y	es /	No				WORK ORDER NON-O	COI	NFORM	MANCE / UPC	DATE		QA Closed:		ate:	
Work Orde	ar.					DISPOSITION				AGAINST	DE	PARTMENT			
Part N	 lo					Rework Scrap Use-as-is Work Order Update		Therm	Skid-tube  Machining  noforming  Large Fab	Crosstube Small Fab Finishing Composite		4	Water Je d. Eng. Coo re/Packagin Supplie	r. g	Engineering Quality Other
Root					Descri	ption of work order update		Initial	Acti	ion		Sign &			
Cause	D	ate	Step	Qty	C	or Non-conformance	Ct	nief Eng	Descr	iption		Date	Verificati	on	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved					- -										
							AUL	LT CATE	GORY						
Landii	ng Gear  Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat				o/s	General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled Over/Under tolerance Part Incorrect Part Lost/Missing Part Moved Positioned Wrong					Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled			
11.	Inspection Strip in Tube					Cut Too Short	$\vdash$	Misread		*		Power Loss/	<del>-</del>		Other
•		ples in	•		Drill Holes Offset					1. 5 6. 25537.	- w. B.	Ш.	Tomor		

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

### Work Order ID 106499

\*106499\*

Page 3

Wednesday, September 04, 2013 11:50:37 A Item ID: D3915-041 Accept \*N900040100\* Setup Start **Revision ID:** Stop Light Lid Assemby, Long Basket Item Name: **Start Date:** 9/4/2013 Start Qty: 1.00 **Cust Item ID:** Required Date: 9/11/2013 Req'd Qty: 1.00 **Customer:** Reference: Run Process Plan: Date: Tooling: **Approvals:** Date: Stop Date: SPC (Y/N): Date: Sequence ID/ Operation Set Up/ **Tool ID** Tool # Plan Reject Reject Accept Insp. **Work Center ID** Qty Number Stamp Description Code **Run Hours** Qty 150 QC9- Inspect visual per QS1004- Fusion Welds 0.00 \*150\* 0.00 Memo Quality Control 155 QC6- Inspect dimensions to drawing 0.00 0.00 Memo Quality Control \*\*\*inspect fit of lid with base\*\*\* 157 Chemical Conversion Coat per QSI005 4.1 0.00 1X J M. J. 13 /04 \*157\* HandFinish 0.00 Memo Hand Finishing 1- regiodine corners \*\*\*do not acid etch\*\*\*

									DQA:	Date:	<b>*</b>
NCR: Yes	/ No			WORK ORDER NON	-co	NFORN	ΛANCE / UP		QA Closed:	Date:	
Work Order:				DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Part No.				Rework Scrap Use-as-is Work Order Update	Scrap   Machining   Small Fab   Use-as-is   Thermoforming   Finishing   Work Order Update   Large Fab   Composite					Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Description of work order update	$\top$	Initial	Ac	tion	Sign &		
Cause	Date	Step	Qty	or Non-conformance	c	hief Eng	Desc	cription	Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved											

ınaıı	ng (	Gear	General		_	_	 _
		Bending	Bend		Grain	Ovalized	Pressure/Forced
		Centre Not Concentric to O/S	BOM/Route		Hardware	Over/Under tolerance	Temperature/Cure
		Cracks	Broken/Damaged		Inspection Incomplete	Part Incorrect	Weld
i ka		Crushed/Crimped	Burrs		Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
		Cuffs	Contamination		Maintenance	Part Moved	
		Heat Treat	Countersink		Mislabeled	Positioned Wrong	 _
		Inspection Strip in Tube	Cut Too Short		Misread	Power Loss/Surge	Other
		Ripples in Bend	Drill Holes		Offset		
		Torque Waves in Extrusion	Drawing .	Ŀ	Out of Calibration		
		Turning Sequence	Finish		Out of Sequence		
		Wave/Twist in Tube	Folio		Outside Dimensions		

**FAULT CATEGORY** 

1												
Work Ord Wednesday, Se		<b>06499</b> 2013 11:50:37 A		*1064	199*							Pag
Item ID: Revision ID: Item Name:	D3915-041	semby, Long Basket		Accept	*N900	<b>040</b>	100	<b>)*</b> . s	Setup	Start Stop	*N *N1	S1*
Start Date: Required Date Reference:	9/4/2013	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:					N	5/
Approvals:	Process P	lan:	Date:	Tooling:	Da	ıte:		I	Run	Start Stop	*N	R1 <sup>*</sup>
	QC:		Date:	SPC (Y/N):	Da			этор	*N	$R2^{3}$		
Sequence ID/ Work Center 160 *160* Powdercoat	ID	Operation Description White Gloss(Ref:4.3.5.1	) per QSI005 4.3-Alum	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp
Powder Coating	25	2- Plug hold  IST COAT  START TIN  OVEN TEN  FINISH TIN  *********  2ND COAT  START TIN	ME:	32001	· ***	÷						

 $m_1abla5$ 

QC3- Inspect Part Finish

0.00

\*170\*

170

Memo

OVEN TEMPERATURE: \_\_\_\_\_FINISH TIME: \_\_\_\_\_

0.00

Quality Control

1 \$ 18-9-16 9

					·				DQA:	Date:	
NCR: Y	es / No				WORK ORDER NON-C	ONFOR	MANCE / UPI	DATE	QA Closed:	Date:	
Work Orde	r:	.,			DISPOSITION			AGAINST DE	PARTMENT,	/PROCESS	
Part N NCR N	o				Rework Scrap Use-as-is Work Order Update	l li	Skid-tube  Machining  moforming  Large Fab	Crosstube Small Fab Finishing Composite	•	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descri	ption of work order update	Initial	Act	tion	Sign &		
Cause	Date	Step	Qty	,	or Non-conformance	Chief Eng	Descr	ription	Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator [											
Material											
Setup											
Other											
Process											
Supplier			1								

		• •	FAULT CATEGORY					
Landi	ng Gear	General						
	Bending	Bend	Grain	Ovalized	Pressure/Forced			
	Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure			
	Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld			
	Crushed/Crimped	Burrs	Instructions Incomplete	/Unclear Part Lost/Missing	Wrong Stock Pulled			
	Cuffs	Contamination	Maintenance	Part Moved	·			
50	Heat Treat `	Countersink	Mislabeled	Positioned Wrong				
y <b>.</b> ₩	Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	Other			
	Ripples in Bend	Drill Holes	Offset					
ļ	Torque Waves in Extrusion	Drawing	Out of Calibration					
	Turning Sequence	Finish	Out of Sequence					
	Wave/Twist in Tube	Folio	Outside Dimensions	-				

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Training Unapproved

<b>Work Ord</b> Wednesday, Sep		0 <b>6499</b> 013 11:50:37 A		*106	3499*							Page	5
Item ID: Revision ID: Iteın Name:	D3915-041 Light Lid Ass	semby, Long Basket		Accept	*N900	<b>040</b>	100	)*	Setup	Start Stop		S1*	
Start Date: Required Date: Reference:	9/4/2013	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item I Customer:	D:						••	
Approvals:	Process Plan:QC:		Date:	Tooling: SPC (Y/N):	Date:				Run	Start Stop		₹1* ₹2*	
Sequence ID/ Work Center II 180 *120* HandFinish Hand Finishing	D		bbing as per dwg	Set Up/ Run Hours 0.00 0.00	Tool ID	Tool#	Plan Code	Accep Qty	t Rej Qt		Reject Number 	Insp. Stamp	80
100		OC5 Inspect part compl	atanass to stan on W/O	0.00									

Quality Control

\*190\*

Identify as per dwg & Stock Location 194030 0430

Memo

99667.

\*200\* Packaging

Memo

0.00

0.00

1 & Bl 13-9-16.

Packaging

200

			DQA:	Da
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE		
			OA Closed:	D:

NCK. 1	<b>23</b> /	NO				WORK ORDER NON-	COIN	Oiti	MARCE / OF DAT		QA Closed:	Date	e:
Work Orde	÷.					DISPOSITION				AGAINST DEI	PARTMENT	/PROCESS	
Part No	-					Rework Scrap		ſ	Machining S	crosstube		Water Jet d. Eng. Coor.	Engineering Quality
NCR N	0			······································		Use-as-is Work Order Update	<u> </u>		~ <u>~</u>	Finishingomposite	Rec/Stor	e/Packaging Supplier	Other
Root					Descr	iption of work order update	lni	tial	Action		Sign &		
Cause	C	ate	Step	Qty		or Non-conformance	Chie	f Eng	Description	on	Date	Verification	QC Inspector
oc/Data													
quip/Tooling	_												
perator	_												
Material	_												
etup	_	İ									•		
ther ,	_  ∙												
rocess	_												
upplier								1					
raining	_										,		
napproved													
							AULT	CATE	GORY			· · <del>- · - · - · · · · · · · · · · · · ·</del>	
Landin	_				_	General					l	_	<del></del> -
		nding			<u> </u>	Bend	-	irain			Ovalized	_	Pressure/Forced
L	→		t Concer	itric to (	o/s	BOM/Route	$\vdash$	ardwa		<b>—</b>	Over/Under	<u> </u>	Temperature/Cure
		cks				Broken/Damaged			on Incomplete	<b>⊢</b>	Part Incorred	-	Weld
			Crimped			Burrs	-		ons Incomplete/Uncle		Part Lost/Mi	ssing	Wrong Stock Pulled
	Cut	fs				Contamination	∐М	lainte	nance		Part Moved		
	He	at Treat	t			Countersink	∐м	1islabe	led		Positioned V	/rong	
	Ins	pection	Strip in	Tube		Cut Too Short	∐м	1isread			Power Loss/	Surge	Other
	Rip	ples in	Bend			Drill Holes	Offset						
	Tor	que W	aves in E	xtrusion	٦	Drawing	Ц٥	ut of C	alibration				
	Tur	ning Se	equence			Finish	ا∟	ut of S	equence				
	Wa	ive/Twi	ist in Tub	e		Folio	0	utside	Dimensions				

Work Ord				*106	3499*						1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Page 6	5
Wednesday, Sep Item ID: Revision ID:	D3915-041	13 11:50:37 A		Accept	*N900	<b>040</b>	100	)*	Setup	Start	*N:	S1*	
Item Name: Start Date: Required Date: Reference:	9/4/2013	Start Qty: 1.00 Req'd Qty: 1.00	*1* *1*		Cust Item ID: Customer:					Stop	*N:	S2*	
Approvals: Process Plan:QC:		Date:	Tooling: SPC (Y/N):	Date:Date:				Run	Start Stop	*NR1* *NR2*			
Work Center ID Descr		Operation Description QC21- Final Inspection -	Work Order Release	Set Up/ Run Hours	Tool ID	Tool#	Plan Code	Accept Qty	Rej Qty		Reject Number	Insp. Stamp	

0.00

Memo

\*21**0**\*

Quality Control

ML5 13-09-20

							٠				DQA:	Date	: ' <u> </u>
NCR: Y	es /	No				WORK ORDER NON-C	10:	NFORM	MANCE / UPDATE				
								<del>,</del>			QA Closed:	Date	:
Work Orde	or:					DISPOSITION			AGAIN	ST DE	PARTMENT	/PROCESS	
Part N	Part No.  NCR No.  Root Desc					Rework Scrap Use-as-is Work Order Update	Therm	Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite			Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other	
Root					Descri	otion of work order update	1	Initial	Action		Sign &		
Cause		Date	Step	Qty	c	or Non-conformance	Ch	nief Eng	Description		Date	Verification	QC Inspector
Doc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training Unapproved													
						F/	<b>AUL</b>	T CATE	GORY				
Landir	ng Gea	ar				General		-		_	_		
	Bending Centre Not Concentric to O/S Cracks Crushed/Crimped			ntric to (	o/s	Bend BOM/Route Broken/Damaged Burrs		Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear			Ovalized Over/Under Part Incorred Part Lost/Mi	ct	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled
	$oldsymbol{oldsymbol{ o}}$	uffs				Contamination		Mainte		$\vdash$	Part Moved		
	⊢⊣	eat Treat			<u> </u>	Countersink	<u> </u>	Mislabe		$\vdash$	Positioned V		٦
	—		Strip in	Tube		Cut Too Short	$\vdash$	Misread		L	Power Loss/	Surge	Other
	Ripples in Bend					Drill Holes	Offset						

Out of Calibration

Out of Sequence

Outside Dimensions

Turning Sequence

Wave/Twist in Tube

Torque Waves in Extrusion

Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Wednesday, September 04, 2013 11:50:45 AM

Work Order ID: 106499

\*106499\*

Parent Item:

D3915-041

\*D3915-041\*

Parent Item Name: Light Lid Assemby, Long Basket

**Start Date: 9/4/2013** 

Required Date: 9/11/2013

Start Qty: 1.00

Required Qty: 1.00

**Comments:** 

IPP Rev:A new issue DD 10.03.19 verified by:EC

IPP Rev:B as

per dwg revB DD 10.04.20 verified by:EC

IPP Rev:C add realodine DD IPP Rev:D as per dwg revC DD 10.08.18

10.04.26 verified by:EC verified by:EC

IPP Rev:E 13.07.08 as per dwg rev.D DD

verf:JLM

IPP REV:D 13.08.21 DWG REV.E / ECN 13-624 DD

VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2957		Manufactured	No			100	Each	25.0000	4	4			
*D2957* Mounting Plate									**	SH	13.09 166-3	. 06	4
Wounting Flate	•			Location		Loc	<u>Oty</u>	Loc Code	•	B-94	166-3	-tr	
				WA004	102507		25				_		
				_	103597 84820 94270		15 2 8			Цx	_		
D3915-1		Manufactured	No		34210	100	Each	9.0000	2		_		
*D3915-1*	•					,			**	SY)	3.09.0	06	

•	*Г	<b>)</b> .	39	1	5	-1	*
1	2 ib						

Location	Loc Oty	Loc Code
WA005	1	
88152	1	
WA006	8	
94452	8	

NCR:	Yes	/	No	

											DQA:	Date	e:	
NCR:	⁄es	/ No				WORK ORDER NON	-COI	NFOR	MANCE / UP	DATE	0461			
						T		r			QA Closed:	Date	e:	
Nork Orde	er:					DISPOSITION			AGAINST DEPARTMENT/PROCESS					
Part N	10.					Rework Scrap Use-as-is		I Thern	Skid-tube Machining Moforming	Crosstube Small Fab Finishing	-	Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other	
NCR N	NO.					Work Order Update			Large Fab	Composite	J	Supplier		
Root						iption of work order update		Initial		tion	Sign &			
Cause		Date	Step	Qty		or Non-conformance	Cr	nief Eng	Desc	ription	Date	Verification	QC Inspector	
oc/Data quip/Tooling perator faterial etup other rocess upplier raining napproved			·											
парргочес				1			FAUI	T CATE	GORY			1		
Landi	ng (	Gear				General						······································	· <u></u>	
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped Cuffs Heat Treat Inspection Strip in Tube Ripples in Bend Torque Waves in Extrusion			Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing		Grain  Hardware  Inspection Incomplete  Instructions Incomplete/Unclear  Maintenance  Mislabeled  Misread  Offset  Out of Calibration			Ovalized Over/Under Part Incorred Part Lost/Mi Part Moved Positioned V Power Loss/	ct issing Vrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other				
Turning Sequence				Finish		Out of S	Sequence							

Outside Dimensions

Wave/Twist in Tube

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Wednesday, September 04, 2013 11:50:45 AM

Work Order ID: 106499 \*106499\* Parent Item: D3915-041 \*D3915-041\* Parent Item Name: Light Lid Assemby, Long Basket **Start Date:** 9/4/2013 Required Date: 9/11/2013 Start Qty: 1.00 Required Qty: 1.00 D4016-5 Manufactured No 100 Each 37.0000 Hinge Half, Light Lid Location Loc Qty Loc Code WA 5 5 WA004 32 103577 12 105052 20 100 13.0000 D4019-3 Manufactured No Each ✓ \*D4019-3\* \*\* Location Loc Qty Loc Code WA006 13 94113 94114 D4035-047 Manufactured No 100 Each 7.0000 Lid Rib Assembly, Aft (Light) Loc Oty Loc Code Location WA005 104422 D4056-1 18.0000 Manufactured No 100 Each Location Loc Qty Loc Code WA004 18 85016 17

											DQA:	Date:	• .
NCR:	Yes	/ No				WORK ORDER NON-C	O	NFOR	MANCE / UP	DATE			
											QA Closed:	Date:	
Work Orde	er.					DISPOSITION	٠,		AGAINST DEPARTMENT/PROCESS				
**************************************	٠,٠,					Rework	1		Skid-tube	Crosstube	1	Water Jet	Engineering
Part N	No.					Scrap			Machining	Small Fab	Pro	d. Eng. Coor.	Quality
						Use-as-is	1		noforming	Finishing	4	re/Packaging	Other
NCR I	۷o.					Work Order Update	1 1		Large Fab	Composite	1	Supplier	H
							•		·				
Root					Descri	ption of work order update		nitial	Act	tion	Sign &		-
Cause	•	Date	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desci	ription	Date	Verification	QC Inspector
Doc/Data									•				
Equip/Tooling							ļ						
Operator													
Material													
Setup		1											
Other													
Process													
Supplier													
Training													
Unapproved				<u></u>									
						F	AUL	T CATE	GORY				
Landi	ng (	Gear				General					-	_	
		Bending				Bend		Grain			Ovalized		Pressure/Forced
Centre Not Concentric to O/S				o/s	BOM/Route	<u></u>	Hardwa	re		Over/Under	tolerance	Temperature/Cure	
		Cracks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	t 🔲	Weld
	Crushed/Crimped					Burrs Instruction			ions Incomplete/l	Jnclear	Part Lost/Mi	ssing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Part Moved

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Wednesday, September 04, 2013 11:50:45 AM

Work Order ID: 106499 \*106499\* Parent Item: D3915-041 \*D3915-041\* Parent Item Name: Light Lid Assemby, Long Basket **Start Date: 9/4/2013** Required Date: 9/11/2013 Start Oty: 1.00 Required Qty: 1.00 D2728-1 Manufactured No 180 Each -1.0000\*D2728-1\* \*\* Dart Logo label small D4029-041 Manufactured No 180 Each 7.0000 \*\* WEBBING (LONG BASKET) Location Loc Qty Loc Code ST489 104994 94089 3 MS20600-AD4W4 180 Each Purchased No 5,528.000 \*MS20600-AD4W4\* \*\* Rivets Location Loc Qty Loc Code ST 4574 125577 4574 ST311 374 123900 350 125406 24 ST506 580 125654 580 NAS1149DN949J Purchased No 180 Each 31.0000 34 \*NAS1149DN949.I\* \*\* Washer Location Loc Qty Loc Code ST293 31 31. 24 120833

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											QA Closed:	Dat	e:	
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Part No.  NCR No.					Rework Scrap Use-as-is	Scrap Machining Smal			Crosstube Small Fab Finishing		Water Jet Prod. Eng. Coor. Rec/Store/Packaging			Engineering Quality Other
NCR I	No				Work Order Update	]		Large Fab	Composite		1	Supplier	╝	
Root				Descr	iption of work order update	1	Initial	Ac	ction		Sign &		П	
Cause	Da	te Ste	p   Qty	,	or Non-conformance	Cł	nief Eng	Desc	cription		Date	Verification	1	QC Inspector
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	Bend	ing			Bend	L	Grain				Ovalized			Pressure/Forced
	Cent	re Not Con	centric t	o O/S	BOM/Route	L	Hardwa	re			Over/Under	tolerance		Temperature/Cure
	Crac	(S			Broken/Damaged		Inspecti	on incomplete			Part Incorred	ct		Weld
		ned/Crimp	ed		Burrs		Instruct	ions Incomplete,	/Unclear		Part Lost/Mi	ssing		Wrong Stock Pulled
	Cuffs				Contamination		Maintenance				Part Moved			

Mislabeled Misread

Out of Calibration

Out of Sequence

Outside Dimensions

Offset

Positioned Wrong

Power Loss/Surge

Other

Turning Sequence

Wave/Twist in Tube

Ripples in Bend

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

Countersink

Cut Too Short Drill Holes

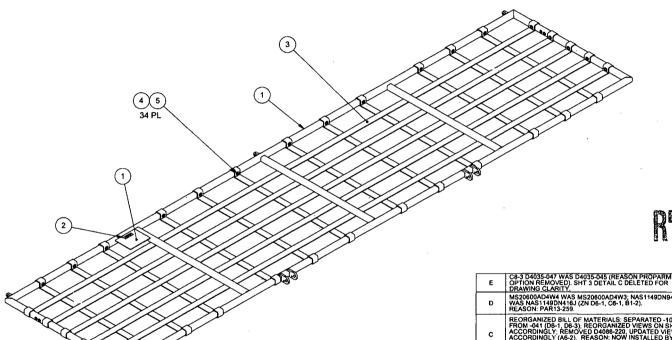
Drawing

Finish

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

QTY -041 ITEM DESCRIPTION X D3915-041 LIGHT LID ASSY, LONG BASKET ASSY BASKET LID WELDMENT ASSY D3915-101 2 D2728-1 DART LOGO LABEL 3 WEBBING (LONG BASKET) D4029-041 NAS1149DN949J 4 34 WASHER 5 34 MS20600AD4W4 RIVET, BLIND, PAN-HEAD

94530 10 H99 pl 13-09-3



D3915-041 LIGHT LID ASSY, LONG BASKET ASSY

AJS 13.07.18 MS20600AD4W4 WAS MS20600AD4W3; NAS1149DN949J WAS NAS1149DN416J (ZN D6-1, C6-1, B1-2). REASON: PAR13-259. MB 13.06.19 REORGANIZED BILL OF MATERIALS: SEPARATED - 101 FROM -041 (DB-1 DB-3); REORGANIZED VIEWS ON SHT 3 ACCORDINGLY, REMOVED D4088-220, UPDATED VIEW ACCORDINGLY (AS-2); REASON: NOW INSTALLED BY OPERATORS PER D350-607-2 REV. C AND D350-607-3 REV. A. MB 10.08.05 MS20600AD4W3 WAS MS20600AD4W5: BOM & (B1-2) JPH 10.04.06

DESIGN AJS **DART AEROSPACE LTD** DRAWN AJS HAWKESBURY, ONTARIO, CANADA W CHECKED DRAWING NO. REV. E D3915 MFG. APPR SHEET 1 OF 4 TITLE **APPROVED** SCALE

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NOTES:
1) MATERIAL: N/A
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: N/A
6) IDENTIFICATION: NONE
7) WEIGHT: 6 98 ibs.

7) WEIGHT: 6.98 lbs

8

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REV.

NEW ISSUE

DESCRIPTION

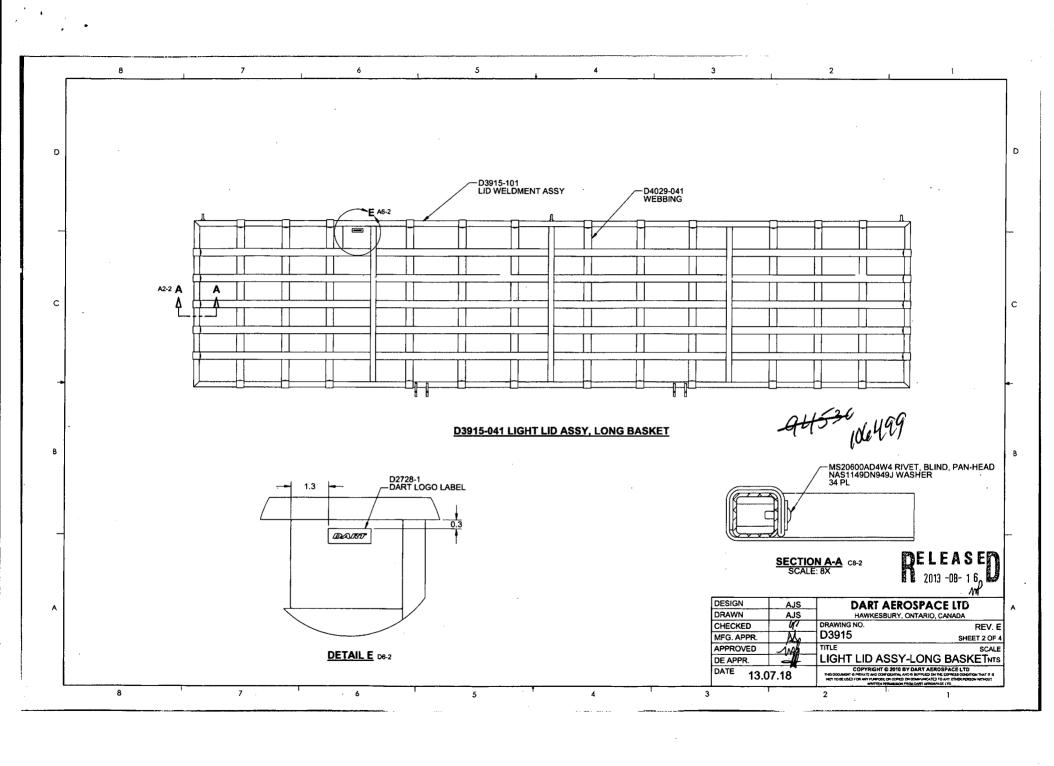
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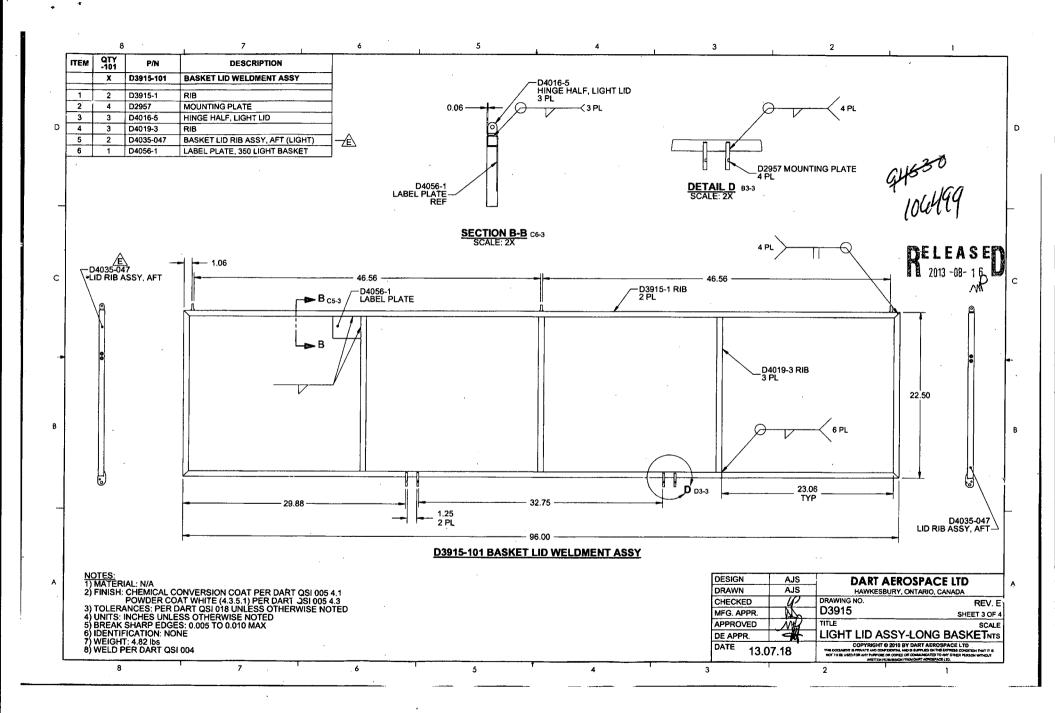
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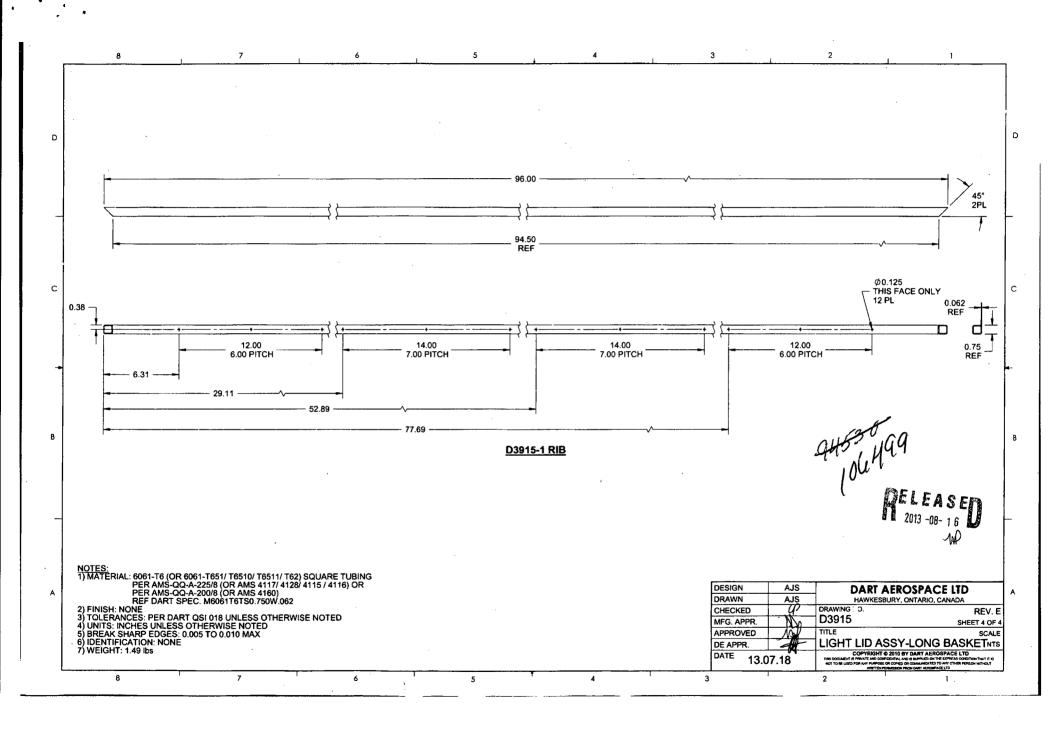
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# DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS D350-807-2 REV. C AND EARLIER, INSTALLATION INSTRUCTIONS D350-807-3 REV. A AND EARLIER, AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D350-807 REV. 4 AND EARLIER

REF. TCCA STC: SH94-14 REF. FAA STC: SR00213NY REF. EASA STC: EASA.10016996

REF. ANAC STC'S: 2007S03-03/-04/-05/-06

#### 1.0 PURPOSE:

It has come to DART's attention that the webbing strands of the cargo net riveted to the structure of the lightweight lids on D350-607-443/-447/-543/-547 Heli-Utility-Baskets at CHG 004 and earlier may pull through the small washer and rivet head and detach during operation.

The purpose of this service instruction is to provide parts and instructions to replace the NAS1149DN416J Washers and MS20600AD4W3 Rivets fastening the webbing strands of the cargo net onto the structure of the lightweight lids with NAS1149DN949J Washers and MS20600AD4W4 Rivets.

Note: This change has been incorporated at a manufacturing level on D350-607-443/-447/-543/-547 Heli-Utility-Baskets at CHG 005 and subsequent and on D350-607-417/-419 Lightweight Lid Kits at CHG 003 and subsequent.

#### 2.0 PROCEDURE:

- 2.1 Carefully remove existing rivets and washers attaching the webbing to the lid frame without enlarging holes in the webbing or the lid frame.
- 2.2 Inspect the basket lid structure in accordance with ICA-D350-807. It is acceptable to inject Sikaflex -241/-291 or Proseal 890 or MIL-S-8802 Class B2 sealant into the lid structure to trap rivet debris inside the tubular structure. Repair and touch up finish as required.
- 2.3 Inspect the D4029-041 Webbing (long basket) or D4029-043 Webbing (short basket) for wear. The maximum acceptable hole size is Ø0.188" (4.8 mm). Replace the webbing if holes are larger than Ø0.188" (4.8 mm) or if the webbing is worn or cuts have been found.
- 2.4 Re-install the webbing as shown in Figure 1 of this service instruction
  <u>Note:</u> It is acceptable to upsize rivets to MS20800AD5W4 (customer supplied) and enlarge the holes in the basket lid structure to Ø0.156° (3.96 mm) if holes were enlarged at Step 2.1.

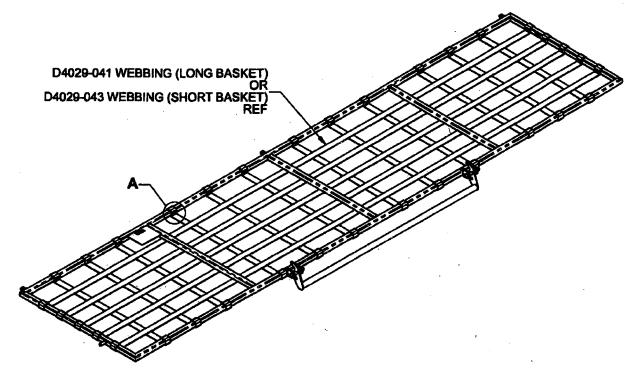
#### 3.0 PARTS LIST

QTY -011	QTY -013	PART NUMBER	DESCRIPTION
<u> x</u>		DSI 9657-011	WASHER CHANGE (LONG LID)
	X	DSI 9657-013	WASHER CHANGE (SHORT LID)
34	30	MS20600AD4W4	BLIND RIVET
34	30	NAS1149DN949J	WASHER

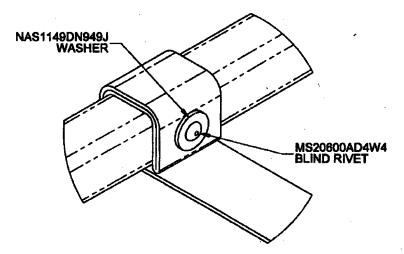
DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-0-01
BY: D. SHEPHERD (DE # 02)
DATE: 13.06.06 CERT. NO.: SH94-14 ISSUE NO.: 5

CANADA

A	NEW IS	SUE			MB	13.08.06			
REV.		1.	, (	DESCRIPTION	BY	DATE			
DESIGN DRAWN			,	DART AER					
CHECK	<del> </del>	U.	7	DRAWING NO.		REV. A			
MFG. A	PPR.	UA	-	DSI 9657		SHEET 1 OF 2			
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DATE	13.0	6.06		COPYRIGHT © 2013 BY DART AEROSPACE LTD THE DOGMENT BY PROVINT AND CONFESSION, AND IS EXPELSE ON THE EDIFFERS ON COMMON THAT IT IS NOT TO BE USED FOR ANY PAPERS ON COMPANY ON OR TO THE PRISON VERTICAL.					



# FIGURE 1: D3915-041 LONG BASKET LID ASSY (LIGHT WEIGHT) D4019-041 SHORT BASKET LID ASSY (LIGHT WEIGHT)



## **DETAIL A: RIVET/WASHER REPLACEMENT**

34 PL ON D3915-041, 30 PL ON D4019-041

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

BY: APPROVED

D. SHEPHERD (DE # 02)

DATE: 13.06.06
CERT. NO.: SH94-14
ISSUE NO.: 5

DESIGN DART AEROSPACE LTD DRAWN HAWKESBURY, ONTARIO, CANADA DRAWING NO. CHECKED REV. A **DSI 9657** MFG. APPR. SHEET 2 OF 2 APPROVED TITLE SCALE WASHER CHANGE DE APPR. NTS COPYRIGHT © 2015 BY DART AEROSPACE LTD
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